

REFERENCES

- BABU, C.R. (1977): Herbaceous Flora of Dehra Dun. Publications and Information Directorate (CSIR), New Delhi.
- DANGWAL, L.R., D.S. RAWAT & R.D. GAUR (1994): Some Rare and Less Known Legumes from Garhwal Himalaya. *J. Indian bot. Soc.* 73 (III & IV): 311-313.
- DANGWAL, L.R., D.S. RAWAT & D.C. NAUTIYAL (1997): Some Rare and Uncommon Legumes from Garhwal Himalaya. *J. Econ. Tax. Bot.* 21(1): 47-51.
- DANGWAL, L.R. & D.S. RAWAT (1996): A new species of *Pueraria* DC. (Fabaceae) from Garhwal Himalaya, U.P., India. *J. Bombay nat. Hist. Soc.* 93(3): 703-705.
- DUTHIE, J.F. (1903): Flora of the Upper Gangetic Plain. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- DUTHIE, J.F. (1906): Catalogue of the Plants of Kumaon and of the adjacent portions of Garhwal and Tibet based on the collections made by Strachey and Winterbottom during the years 1846-1849 and on the catalogue originally prepared in 1852 by R. Strachey. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- GAUR, R.D. (1987): A Contribution to the Flora of Srinagar Garhwal. *J. Econ. Tax. Bot.* 9: 31-63.
- GAUR, R.D., L.R. DANGWAL & D.S. RAWAT (1993): Some Rare and little known Plants of Fabaceae from Garhwal Himalaya. *Indian Journal of Forestry* 17(1): 80-83.
- HOOKE, J.D. (1876): Flora of British India. Vol. II. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- NAITHANI, B.D. (1984): Flora of Chamoli. Vol. I. Botanical Survey of India. Howrah.
- OSMASTON, A.E. (1927): A Forest Flora of Kumaon. Bishen Singh Mahendra Pal Singh, Dehra Dun (Repr. edn).
- POLUNIN, O. & A. STANTON (1985): Flowers of the Himalaya. Oxford University Press, New Delhi.
- SANJAPPA, M. (1992): Legumes of India. Bishen Singh Mahendra Pal Singh, Dehra Dun.

27. REDISCOVERY OF *WENDLANDIA ANGUSTIFOLIA* WIGHT EX HOOK.F. (RUBIACEAE), FROM TAMIL NADU, A SPECIES PRESUMED EXTINCT

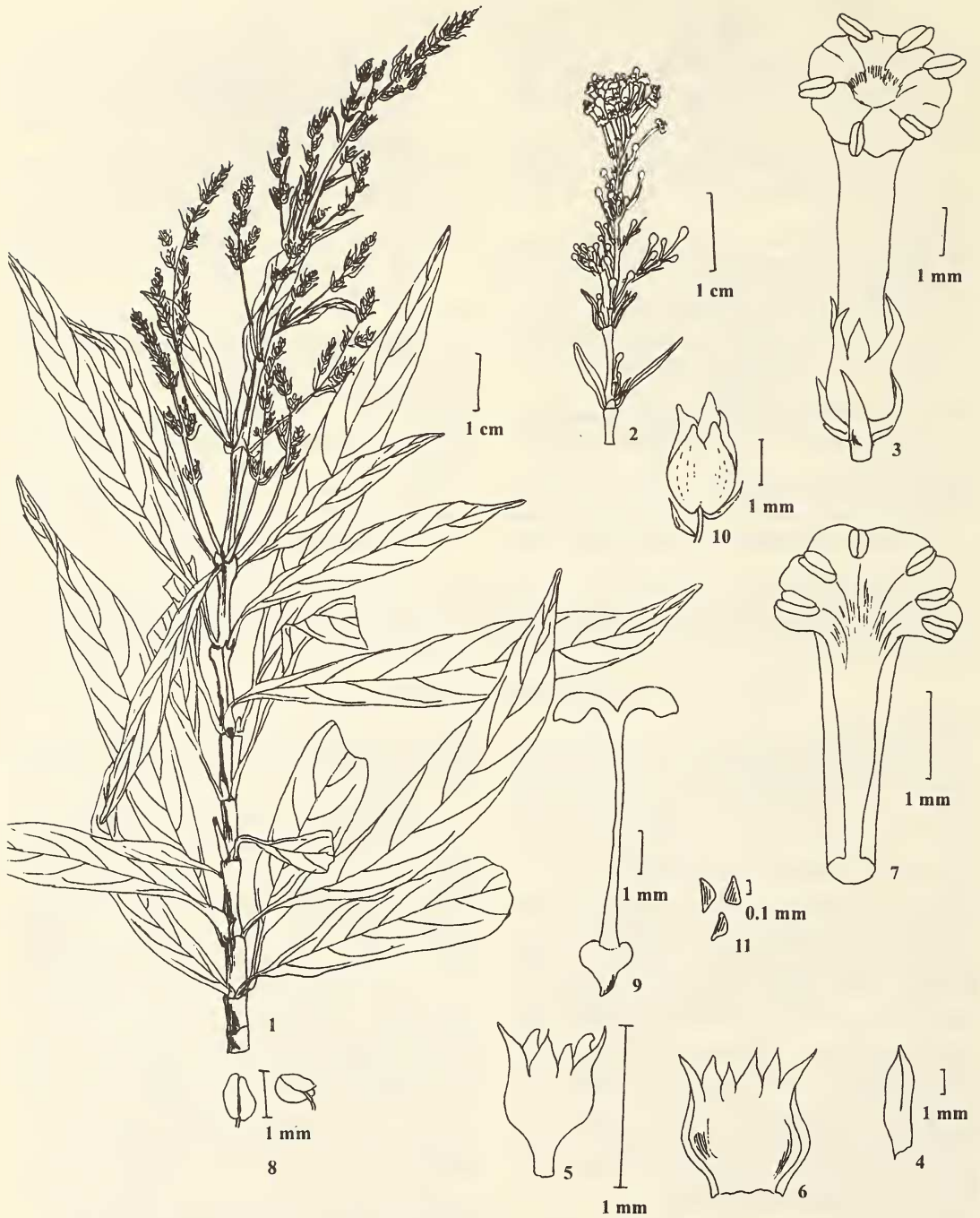
(With eleven text-figures)

Wendlandia angustifolia Wight ex Hook.f., Family Rubiaceae, was first described by Hook.f. (1880) based on Wight's manuscript who collected it from Courtallum. Later, Rangachari collected it from Kannikatti in 1917. Deb and Maiti who revised the genus opine that the species is presumed extinct, and efforts should be made to relocate it in the river beds at low altitudes, to introduce it in botanic gardens to conserve the species. However, the species was rediscovered after a lapse of 81 years, in its known habitat at Inchikuzhi near Kannikatti during an inventory of threatened plants of the Kalakkad Mundanthurai Tiger Reserve (KMTR), Tirunelveli district, Tamil Nadu, in 1998. The species is described and illustrated.

Wendlandia angustifolia Wight ex Hook.f., Fl. Brit. India 3: 40. 1880; Gamble, Fl. Pres. Madras 588. 1921 (repr. ed. 2: 415. 1957); Deb

& Maiti in Nayar & Sastry, Red Data Book Indian Pl. 1: 348. 1987.

Shrub or tree, up to 4 m high. Leaves ternately whorled, linear-lanceolate, attenuate at base, entire at margin, acute at apex, 4-11 x 0.5-1.8 cm, coriaceous; lateral nerves 6-8 pairs; petioles up to 1 cm long; stipules triangular-ovate, subulate or cuspidate at apex, persistent, 3-5 x 0.8-1 mm. Inflorescence at terminal branches, in panicles; panicles slender, pyramidal, leafy below; flowers densely crowded; bracts ligulate, hastate at base, acuminate at apex, 0.7-0.9 x 0.3-0.5 mm. Calyx tube turbinate, 4 to 6 lobed, c. 0.9 x 1 mm; lobes subulate, subequal, triangular ovate in outline, subulate at apex, c. 0.6 x 0.2 mm. Corolla white, salverform, 4 to 6 lobed, c. 4 x 1.2 mm; lobes orbicular, obtuse or slightly notched at apex, c. 1.1 x 1.1 mm. Stamens 4-6, epipetalous, between corolla lobes



Figs. 1-11: *Wendlandia angustifolia*: 1. A twig; 2. Inflorescence; 3. Flower; 4. Bract; 5. Calyx; 6. Calyx split open; 7. Corolla split open; 8. Anthers dorsal and ventral sides; 9. Ovary; 10. Fruit; and 11. Seeds.

exserted; filaments 0.75 x 0.8 mm; anthers pale yellow, oblong-ovate, dorsifixed, c. 1 x 0.6 mm. Ovary inferior; style linear, 4.5-5.8 x 0.15-0.2 mm; stigma 2-lobed, clavate, c. 0.8 x 0.6 mm. Fruits globose, rugose, many-seeded, c. 2 mm across; seeds brown, irregularly oblong-trigonus or trigonus, c. 0.3 x 0.2 mm.

Note: According to Hook.f. (1880) and Gamble (1921), flowers are either 4- or 5-merous. But the flowers in the recent collection show 4- or 6-merous conditions. Anther colour yellow is recorded for the first time. Sporadic populations can be seen along the stream and river beds between Inchikuzhi and Mundanthurai in the KMTR.

Specimens examined: Tamil Nadu: Tirunelveli district: Mundanthurai, 16.iii.1917, Madras Herbarium South Indian Flora (without collector and *sine numero*) 14628 (MH Acc. No.); Kannikatti, 19.iii.1917, Madras Herbarium South Indian Flora (without collector and *sine numero*) 14663 (MH Acc. No.); Inchikuzhi, +1,000 m, 16.ii.1998, M.B. Viswanathan, E. Harrison Premkumar and N. Ramesh 1641;

Inchikuzhi, +1,000 m, 24.v.1998, M.B. Viswanathan, E. Harrison Premkumar and N. Ramesh 2010.

ACKNOWLEDGEMENTS

We thank Dr. N. Sukumaran, Professor & Head of our Centre, for encouragement, Thiru K.P.S. Katwal, I.F.S., Addnl. Chief Conservator of Forests & Chief Wildlife Warden, Chennai, and Dr. V.K. Melkani, I.F.S., Field Director & Conservator of Forests, Project Tiger, Tirunelveli, for permission to collect plant specimens for authentication.

June 14, 1999

M.B. VISWANATHAN
E. HARRISON PREMKUMAR
N. RAMESH
*Sri Paramkalyani Centre for
Environmental Sciences,
Manonmaniam Sundaranar University,
Alwarkurichi 627 412,
Tamil Nadu,
India.*

28. *LACTUCA GRACILIFLORA* DC. (ASTERACEAE) — AN ADDITION TO THE FLORA OF HIMACHAL PRADESH

During a systematic survey of the flora of Kulu district (Himachal Pradesh) in 1988-1992, 930 species of spermatophytes were gathered. Out of these, 32 species were found to be additions to the flora of Himachal Pradesh (Sharma and Dhaliwal 1997). Meanwhile, a specimen collected from the district was identified at Kew Herbarium as *Lactuca graciliflora* DC. A perusal of Chowdhery and Wadhwa (1984) and subsequent reports (Sharma and Dhaliwal 1997) revealed that this taxon has not been reported from the State. Further, in the most recent work on the Asteraceae of India, Mamgain and Rao (1995) mention the distribution of this species from Uttar Pradesh, West Bengal and Sikkim. Earlier, Hooker (1881)

had recorded it from Central and Eastern Himalaya. Apparently, our record is a westward extension of the species. Information about the specimens collected is given below.

Lactuca graciliflora DC. Prodr. 7:139.1839; Hook.f. Fl. Brit. India 3:406.1881; Mamgain and Rao in Hajra *et al.* Fl. India 12:289. f. 71.1995.

Description: Glabrous or minutely hairy annual or biennial herb, 0.8-1.5 m tall. Leaves 5-15 x 2-5 cm, membranous; lower triangular, pinnatifid or pinnate, narrowed to a slender petiole; uppermost ovate or lanceolate, sessile. Inflorescence a terminal panicle, 30-60 cm long. Heads 1-1.3 x 0.1-0.2 cm, pink or pinkish-purple, drooping, with small slender peduncles. Outer